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## CLAIMS:

1.     (Original) A method for generating a splice point adapter, comprising the steps of:

identifying at least one out-frame within a transport stream, said out-frame representing a last frame of said transport stream to be included in a spliced transport stream;

decoding, for each identified out-frame, a respective portion of said transport stream including said out-frame; and

re-encoding each decoded portion of said transport stream to produce a respective out-point adapter, each of said out-point adapters including a predefined terminating out-point condition.

2.     (Original) The method of claim 1, further comprising the steps of:

identifying at least one in-frame within said transport stream, said in-frame representing a first frame of said transport stream to be included in a spliced transport stream;

decoding, for each identified in-frame, a respective portion of said transport stream including said in-frame; and

re-encoding each decoded portion of said transport stream to produce a respective in-point adapter, each of said in-point adapters including an predefined initial in-point condition.

3.     (Original) The method of claim 1, further comprising the step of:

associating each out-point with a respective out-point adapter, wherein, in the case of a concatenating an additional transport stream to said transport stream at a particular out-point, said decoded portion of said transport stream proximate said particular out-point is replaced by said out-point adapter associated with said particular out-point.

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4.      (Original) The method of claim 2, further comprising the step of:

associating each in-point with a respective in-point adapter, wherein, in the case of a concatenating said transport stream to an additional transport stream at a particular in-point, said decoded portion of said transport stream proximate said particular in-point is replaced by said in-point adapter associated with said particular in-point.

5.      (Original) The method of claim 1, wherein said decoded portion of said transport stream including said out-frame comprises said out-frame and all preceding frames, in display order, from said out-frame to a prior I-frame;

in the case of said out-frame comprising a B-frame, defining the frame immediately preceding said prior I-frame in transmission order as a final first transport stream frame in said transition stream; and

in the case of said out-frame not comprising a B-frame, defining said out-frame as said final first transport stream frame in said transition stream.

6.      (Original) The method of claim 1, wherein said portion of transport stream including said in-frame to be decoded is determined according to the steps of:

decoding, in display order, said in-frame and all non-I-frames following said in-frame up to a next I-frame.

7.      (Original) The method of claim 2, further comprising the step of indexing each of said transport stream, said step of indexing comprising the steps of:

parsing a transport layer of said transport stream to identify packets associated with at least one of sequence headers, picture headers and predefined splicing syntax; and

determining, for each frame in said transport stream, at least one of a picture number, a picture coding type, a start of frame transport packet number, an end of frame transport packet number, a presentation time stamp (PTS) and a decode time stamp (DTS).

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8.      (Original) The method of claim 7, wherein said determinations for each frame are stored in a meta file for subsequent use in generating a transition stream.

9.      (Original) A method for generating a splice point adapter, comprising the steps of:
        identifying at least one in-frame within a transport stream, said in-frame representing a first frame of said transport stream to be included in a spliced transport stream;
        decoding, for each identified in-frame, a respective portion of said transport stream including said in-frame; and
        re-encoding each decoded portion of said transport stream to produce a respective in-point adapter, each of said in-point adapters including an predefined initial in-point condition.

10.     (Original) The method of claim 9, further comprising the steps of:
        identifying at least one out-frame within said transport stream, said out-frame representing a last frame of said transport stream to be included in a spliced transport stream;
        decoding, for each identified out-frame, a respective portion of said transport stream including said out-frame; and
        re-encoding each decoded portion of said transport stream to produce a respective out-point adapter, each of said out-point adapters including a predefined terminating out-point condition.

11.     (Original) The method of claim 10, further comprising the step of:
        associating each out-point with a respective out-point adapter, wherein, in the case of a concatenating an additional transport stream to said transport stream at a particular out-point, said decoded portion of said transport stream proximate said particular out-point is replaced by said out-point adapter associated with said particular out-point.

12.    (Original) The method of claim 9, further comprising the step of:

associating each in-point with a respective in-point adapter, wherein, in the case
of a concatenating said transport stream to an additional transport stream at a particular
in-point, said decoded portion of said transport stream proximate said particular in-point
is replaced by said in-point adapter associated with said particular in-point.

13.    (Original) The method of claim 10, wherein said decoded portion of said
transport stream including said out-frame comprises said out-frame and all preceding
frames, in display order, from said out-frame to a prior I-frame;

in the case of said out-frame comprising a B-frame, defining the frame
immediately preceding said prior I-frame in transmission order as a final first transport
stream frame in said transition stream; and

in the case of said out-frame not comprising a B-frame, defining said out-frame
as said final first transport stream frame in said transition stream.

14.    (Original) The method of claim 9, wherein said portion of transport stream
including said in-frame to be decoded is determined according to the steps of:

decoding, in display order, said in-frame and all non-I-frames following said in-
frame up to a next I-frame.

15.    (Original) The method of claim 9, further comprising the step of indexing each of
said transport stream, said step of indexing comprising the steps of:

parsing a transport layer of said transport stream to identify packets associated
with at least one of sequence headers, picture headers and predefined splicing syntax;
and

determining, for each frame in said transport stream, at least one of a picture
number, a picture coding type, a start of frame transport packet number, an end of
frame transport packet number, a presentation time stamp (PTS) and a decode time
stamp (DTS).

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16. (Original) The method of claim 15, wherein said determinations for each frame are stored in a meta file for subsequent use in generating a transition stream.

17. (Original) In a system for processing transport streams, apparatus for generating a splice point adapter comprising:

a controller, for identifying at least one out-frame within a transport stream, said out-frame representing a last frame of said transport stream to be included in a spliced transport stream;

a decoder, responsive to said controller, for decoding each identified out-frame, a respective portion of said transport stream including said out-frame; and

an encoder, for re-encoding each decoded portion of said transport stream to produce a respective out-point adapter, each of said out-point adapters including a predefined terminating out-point condition.

18. (Original) The apparatus of claim 17, wherein:

said controller identifies at least one in-frame within said transport stream, said in-frame representing a first frame of said transport stream to be included in a spliced transport stream;

said decoder decodes, for each identified in-frame, a respective portion of said transport stream including said in-frame; and

said encoded re-encodes each decoded portion of said transport stream to produce a respective in-point adapter, each of said in-point adapters including an predefined initial in-point condition.

19. (Original) The apparatus of claim 17, wherein:

said controller associates each out-point with a respective out-point adapter, wherein, in the case of a concatenating an additional transport stream to said transport stream at a particular out-point, said decoded portion of said transport stream

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proximate said particular out-point is replaced by said out-point adapter associated with said particular out-point.

20.    (Original) The apparatus of claim 18, wherein:

said controller associates each in-point with a respective in-point adapter, wherein, in the case of a concatenating said transport stream to an additional transport stream at a particular in-point, said decoded portion of said transport stream proximate said particular in-point is replaced by said in-point adapter associated with said particular in-point.

21.    (Original) The apparatus of claim 17, wherein said decoded portion of said transport stream including said out-frame comprises said out-frame and all preceding frames, in display order, from said out-frame to a prior I-frame;

in the case of said out-frame comprising a B-frame, said controller defines the frame immediately preceding said prior I-frame in transmission order as a final first transport stream frame in said transition stream; and

in the case of said out-frame not comprising a B-frame, said controller defines said out-frame as said final first transport stream frame in said transition stream.

22.    (Original) The apparatus of claim 17, wherein said controller causes said decoder to decode, in display order, said in-frame and all non-I-frames following said in-frame up to a next I-frame to provide said portion of transport stream including said in-frame to be decoded.

23.    (Original) The apparatus of claim 18, wherein:

said controller parses a transport layer of said transport stream to identify packets associated with at least one of sequence headers, picture headers and predefined splicing syntax; and

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said controller determines, for each frame in said transport stream, at least one of a picture number, a picture coding type, a start of frame transport packet number, an end of frame transport packet number, and

presentation time stamp (PTS) and a decode time stamp (DTS).

24.     (Original) The apparatus of claim 23, further comprising:

a memory, for storing within a meta file said controller determinations for each frame in said transport stream, said meta file intended for subsequent use in generating a transition stream.